Claims

[c1]   What is claimed is:

1. A switch control system for a plurality of input devices comprising a real input device and an emulation input device, the switch control system comprising:

a switch device for selecting either of the two input devices, and then isolating signals of an unselected input device when the selected input device is transmitting or receiving signals;

an instruction detecting device electrically connected to the switch device for detecting signals transmitted to the switch device; and

a control device electrically connected to the switch device and the instruction detecting device for receiving a detecting signal from the instruction detecting device and outputting a control signal to trigger the switch device and to control the selection of the switch device.

[c2]   2. The switch control system of claim 1, wherein the signals comprise a real signal and an emulation signal, and the switch device comprises:

a first switch coupled to the real input device for selecting the real signal;

a second switch coupled to the first switch, the emulation input device, and the control device for selecting the real signal or the emulation signal and transmitting either of the two signals according to the control signal;

a third switch coupled to the emulation input device and the first switch for transmitting the signals either to the real input device or to the emulation input device according to the control signal when the second switch is triggered by the control signal; and

a fourth switch coupled to the first switch, the third switch and the real input device either for enabling the emulation input device to receive the emulation signal or for disabling the first switch so that the emulation input device is capable of receiving the real signal from the third switch according to the control signal.

[c3]   3. The switch control system of claim 2, wherein the four switches respectively comprise at least a multiplexer.

[c4]   4. The switch control system of claim 1 further comprising:

a logic device comprising a first input terminal coupled to the control device for receiving the control signals, a second input terminal, and an output terminal coupled to the switch device for outputting the control signal to the switch device; and

a setting device coupled to the second input terminal of

the logic device for setting operation modes of the logic device to trigger the switch device with the control signal.

[c5]   5. The switch control system of claim 1, wherein the real input device and the emulation input device each comprises a PS/2 communication interface.

[c6]   6. The switch control system of claim 1, wherein the real input device is a mouse, a keyboard or a combination of both.

[c7]   7. The switch control system of claim 1, wherein the emulation input device is the emulation of a mouse, a keyboard or a combination of both.

[c8]   8. A switch control system for a plurality of input devices comprising a real input device and an emulation input device, the switch control system comprising:
a first switch coupled to the real input device for selecting a real signal;
a second switch coupled to the first switch, the emulation input device, a control device for selecting the real signal or the emulation signal transmitted and for transmitting either the real signal or the emulation signal according to a control signal;
a third switch coupled to the emulation input device and

the first switch for transmitting the signals to the real input device or to the emulation input device according to the control signal when the second switch is triggered by the control signal; and

a fourth switch coupled to the first switch, the third switch and the real input device either for enabling the emulation input device to receive the emulation signal or for disabling the first switch so that the emulation input device is capable of receiving the real signal from the third switch according to the control signal.

[c9]   9. The switch control system of claim 8, wherein the four switches respectively comprise at least a multiplexer.

[c10]   10. A switch control method for a plurality of input devices comprising a real input device and an emulation input device, the switch control method comprising the steps of:

executing an initialization process and setting parameters of a communication interface for the input devices;

transmitting/receiving a signal with a switch device according to the communication interface;

transmitting/receiving the signal with the real input device when the switch device is selecting the real input device and then isolating the real input device and the emulation input device;

detecting the signal transmitted to or from the switch

device with an instruction detecting device, and then outputting a first detecting signal once detecting that the real input device is responding or outputting a second detecting signal once detecting that the emulation input device is responding; and

outputting a first control signal to respond to the first detecting signal or a second control signal to respond to the second detecting signal respectively and switching the emulation input device to the real input device with the second control signal.

[c11]   11. The switch control method of claim 10, wherein the step of selecting the real input device further comprises the step of outputting a first disabling signal to disable a third switch to the third switch so that the signal is transmitted from the real input device via a first switch and a second switch.

[c12]   12. The switch control method of claim 10, wherein the step of selecting the real input device further comprises the step of outputting a second disabling signal to disable a first switch to the first switch so that the signal is transmitted to the real input device via a third switch and a fourth switch.

[c13]   13. The switch control method of claim 10, wherein in the step of outputting the first control signal, the signal

can travel from the emulation input device via a second switch once the emulation input device is selected and both a first switch and a fourth switch are disabled.

[c14] 14. The switch control method of claim 10, wherein in the step of outputting the first control signal, the signal can travel via a third switch to the emulation input device once the emulation input device is selected and both a first switch and a fourth switch are disabled.

[c15] 15. The switch control method of claim 10, wherein the step of selecting the real input device further comprising the step of recording values of the scan_code_set.

[c16] 16. The switch control method of claim 10, wherein the communication interface for transmitting signal comprises a PS/2 communication interface.

[c17] 17. The switch control method of claim 10 further comprising the step of receiving and outputting the control signal to trigger the switch device by a logic device.

[c18] 18. The switch control method of claim 17 further comprising the step of setting operation modes of the logic device with a setting device.

[c19] 19. The switch control method of claim 10, wherein the real input device is a mouse, a keyboard or a combina-

tion of both.

[c20]   20. The switch control method of claim 10, wherein the emulation input device is the emulation of a mouse, a keyboard or a combination of both.